



Lustre Development Update

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lustre.org


lustre.org: Under New Management



The screenshot shows the Lustre.org website homepage. At the top, there is a navigation bar with links for Download, Documentation, Development, News, and About. The Lustre logo is prominently displayed on the left. A search bar is located on the right side of the header. The main content area features a welcome message, a description of the Lustre file system, and a 'What's Here?' section with links to documentation, releases, and development. On the right side, there are logos for OpenSFS and EOFS, a 'Latest News' section with recent updates, and a 'Lustre Links' section with links to download and the releases roadmap.

Download Documentation Development News About

Lustre®


Search 

Welcome to the official home of the Lustre filesystem

The Lustre® file system is an open-source, parallel file system that supports many requirements of leadership class HPC simulation environments. Whether you're a member of our diverse development community or considering the Lustre file system as a parallel file system solution, these pages offer a wealth of resources and support to meet your needs.

What's Here?

- Here's how to [get started with the Lustre file system](#), with links to the [documentation](#), and information on how to [download](#) the Lustre software.
- The [Releases Roadmap](#) outlines the community's schedule of releases and main features.
- The [Development](#) page describes how you can participate in the advancement of the Lustre file system by joining the development activities currently taking place, including code development, testing, filing bugs, and benchmarking.



Latest News

- [Lustre 2.7.0 Released](#)
- [Developer Day April 16, 2015](#)
- [LUG 2015](#)

Lustre Links

-  [Download Lustre](#)
-  [Releases Roadmap](#)

Official Lustre Mailing Lists

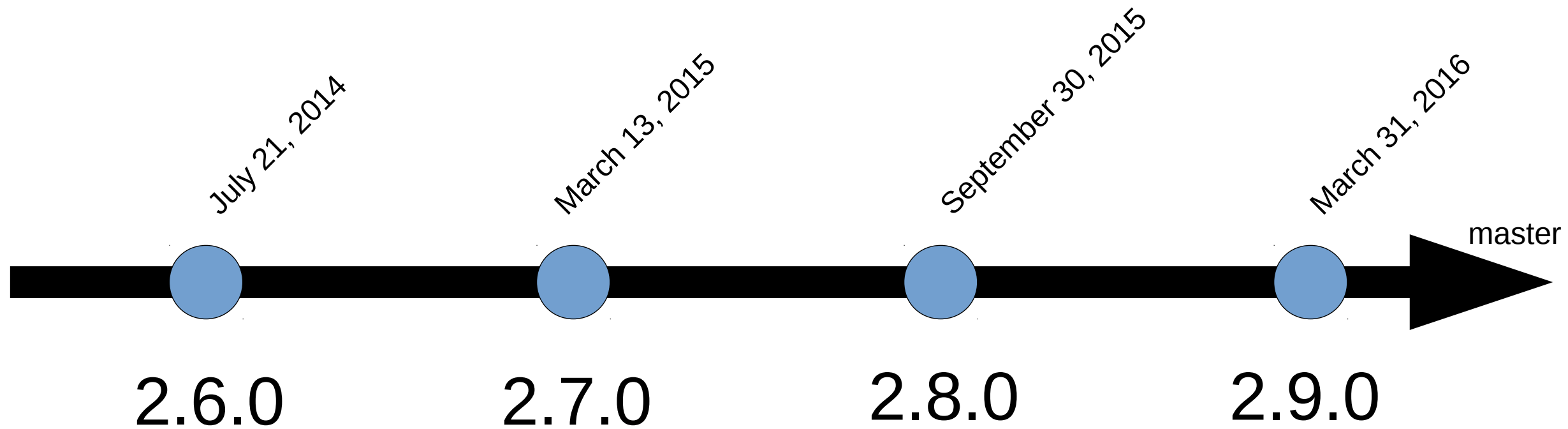
lustre-announce

lustre-discuss

lustre-devel

See: <http://lustre.org/mailling-lists>

Major Releases Every Six Months



What happened to Maintenance Releases?

Obsolete Roadmap

Community Lustre Roadmap



¹ Maintenance releases focus on bug fixes and stability. Updates to the current version are made at 3 month intervals. Updates to past versions will be made on an ad hoc basis.

² Feature releases focus on introducing new features. New release versions are expected at 6 month intervals. New maintenance versions from the feature release stream are anticipated at 18 month intervals.

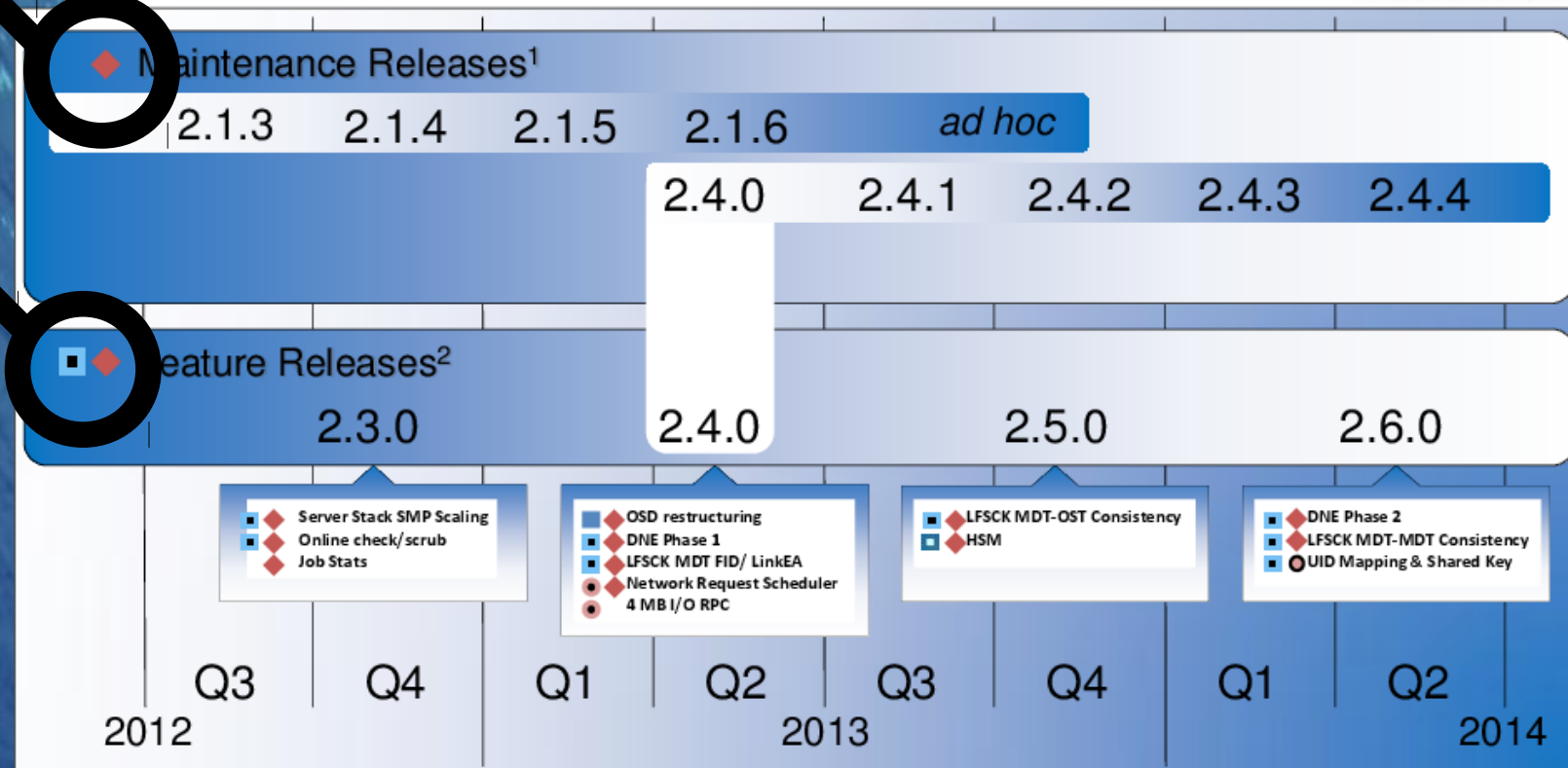


Obsolete Roadmap

Intel
Funded

OpenSFS/Intel
Funded

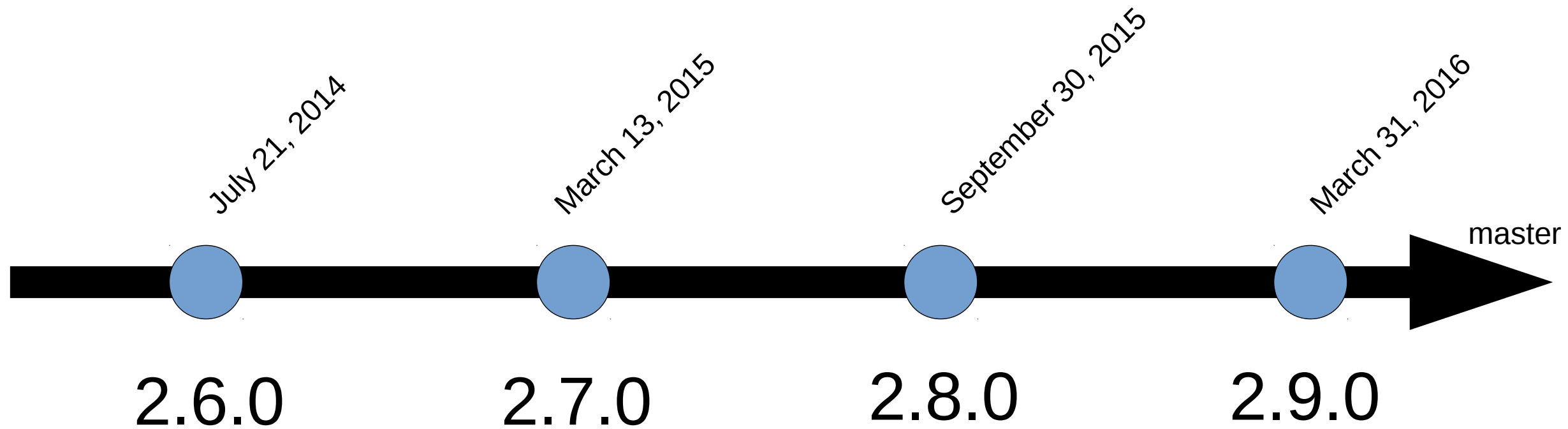
Community Lustre Roadmap



Sponsors for Development and Releases: ORNL, OpenSFS, LLNL, Intel, CEA, Xyratex, Indiana University

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Planned Roadmap



Lustre 2.6.0 - July 21, 2014

- LFSCK Phase 2, MDT-OST Consistency (Intel/OpenSFS)
- Client single thread performance improvements (Intel)
- Striped Directories - Technology Preview (Intel/OpenSFS)

Lustre 2.7.0 - March 13, 2015

- LFSCK Phase 3 - MDT-MDT Consistency (OpenSFS/Intel)
- Dynamic LNet Config (Intel)
- Fine grain OST placement (Fujitsu)
- UID/GID mapping (Indiana University)
- Striped Directories - Technology Preview Continues

Lustre 2.8.0 - ~~Sept. 30~~ October, 2015

- DNE Phase IIb (async commit and recovery)
- LFCK phase 4 (performance tuning)
- Multiple modify RPCs per client
- RHEL 7 server support
- SELinux preliminary client support

Development Projects Under Way

- UID/GID Mapping (IU)
- Shared Key Crypto (IU)
- Lock ahead (Cray)
- Kerberos Revival (Bull/Atos)
- NRS Delay Policy (Cray)

See: <http://wiki.lustre.org/Projects>

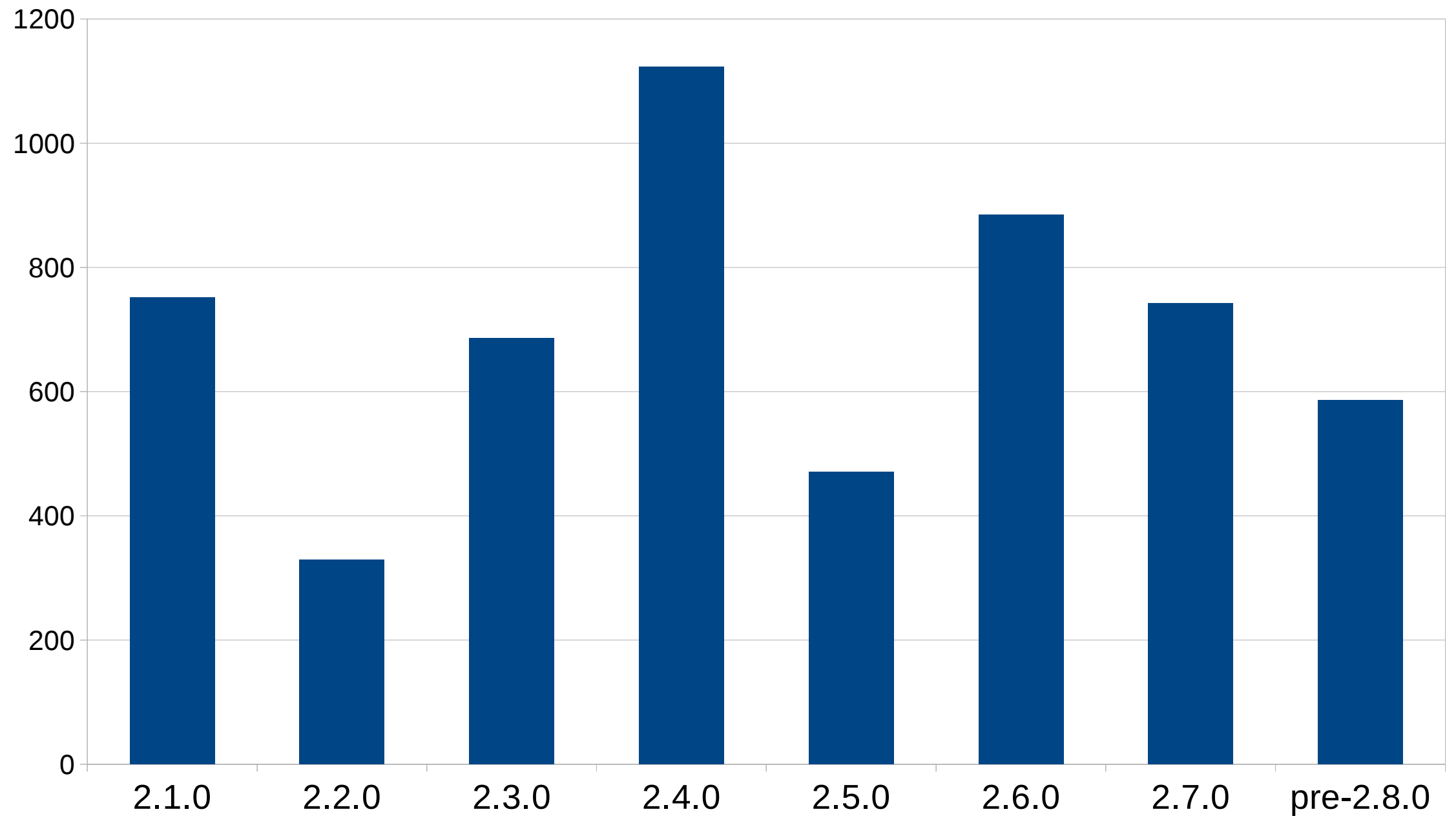
Pre-2.8.0 Statistics

The following preliminary 2.8.0 information was gathered from the range:

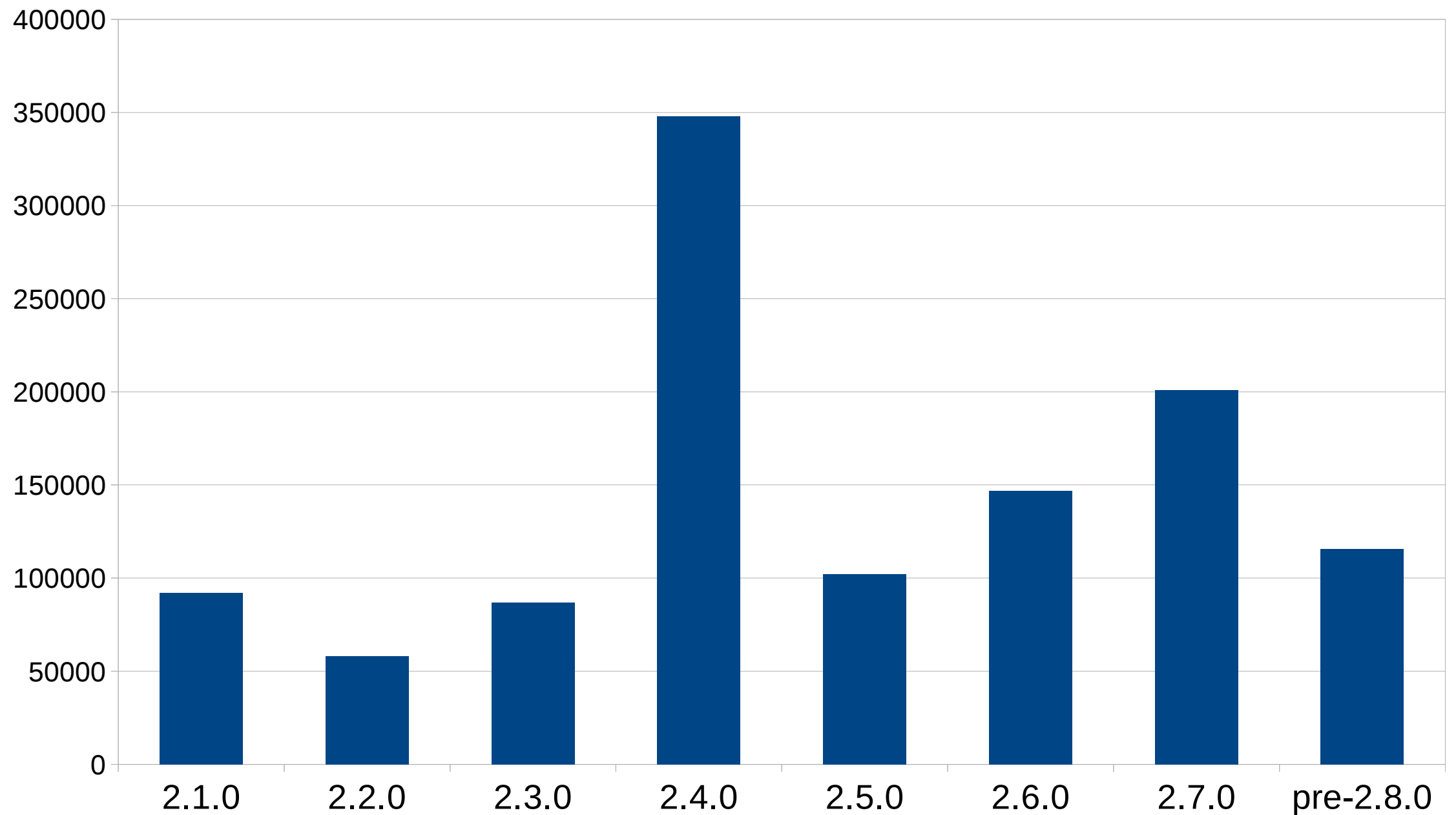
2.7.0..61b4d4ff8e9a6e7539aa3a7dcc4dd1aea6b4f927

(September 11, 2015)

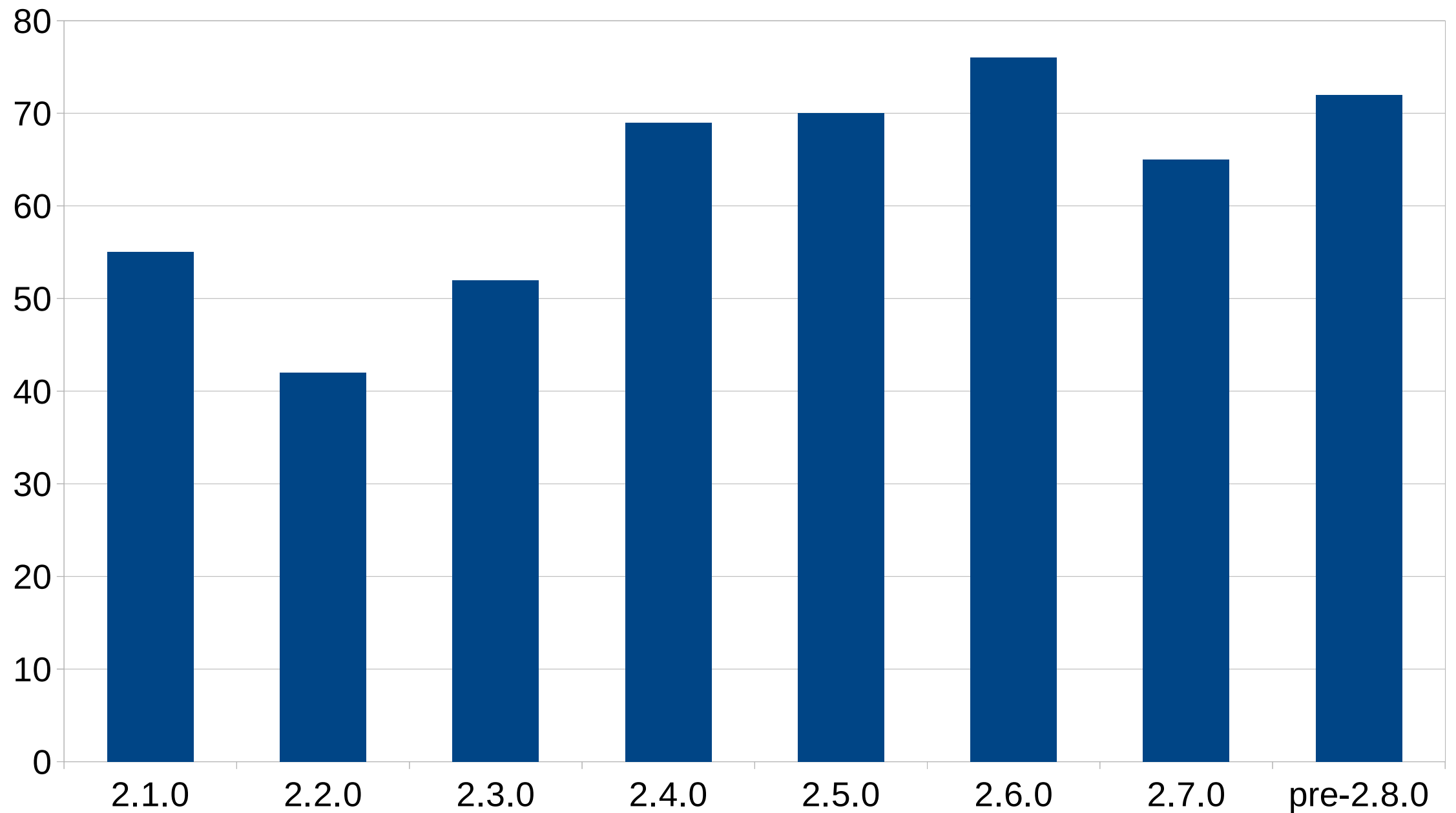
Commits Per Lustre Release



Lines of Code Changed Per Lustre Release



Commit Authors Per Lustre Release

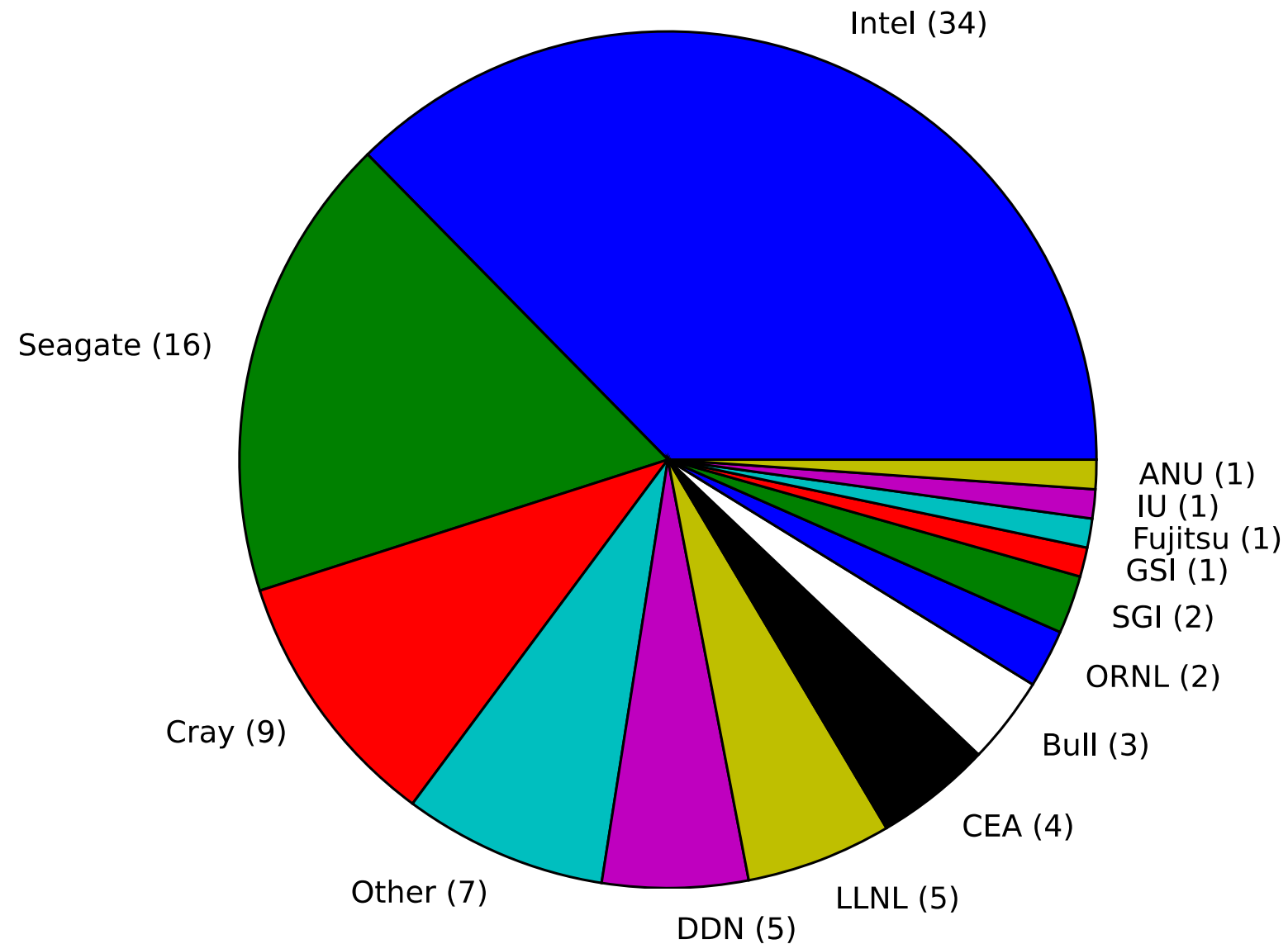


Lustre Client in upstream Kernel

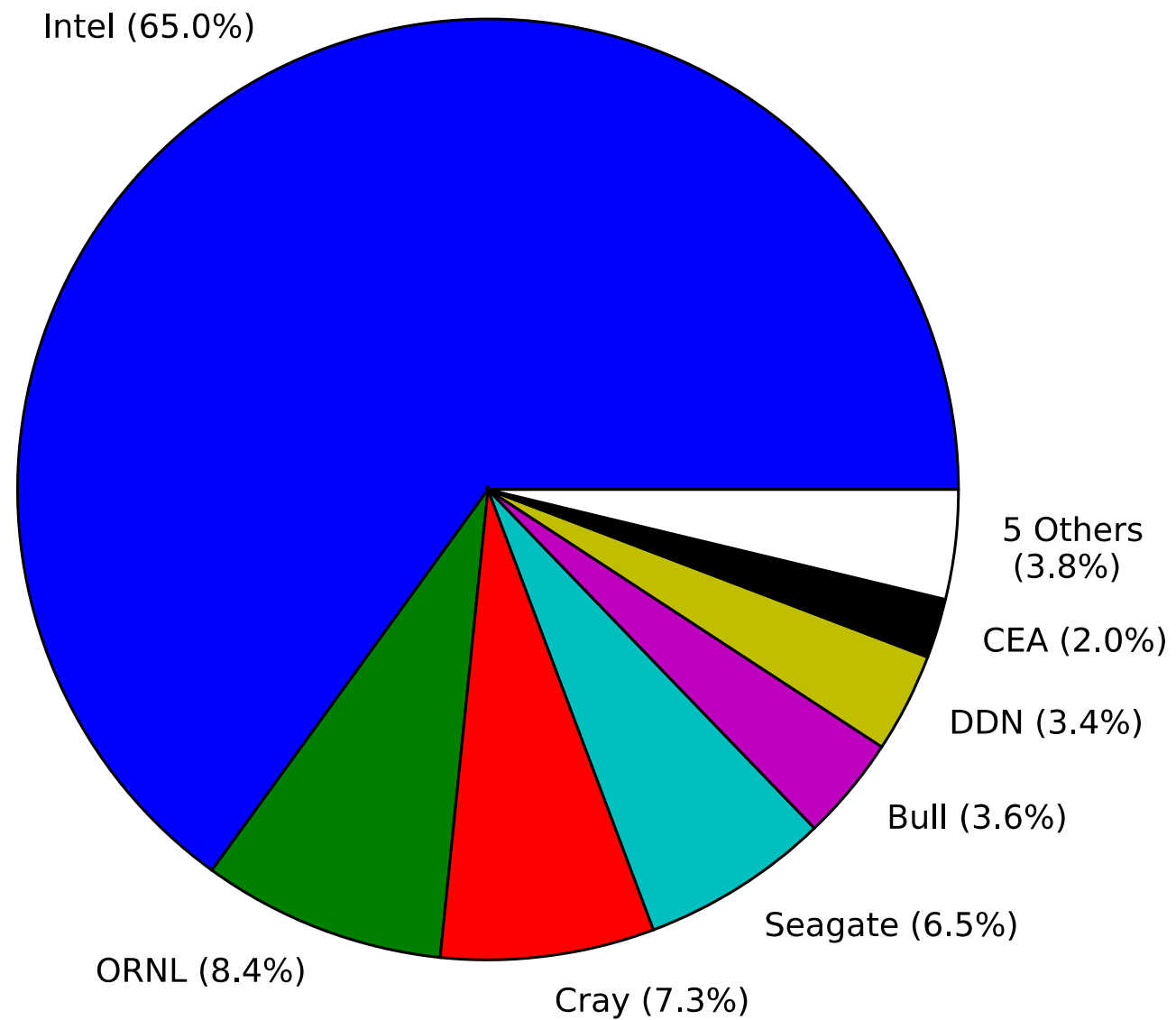
- Work continues to promote Lustre out of Staging
- Avoided getting kicked out of the kernel

Pre-2.8 Release Statistics

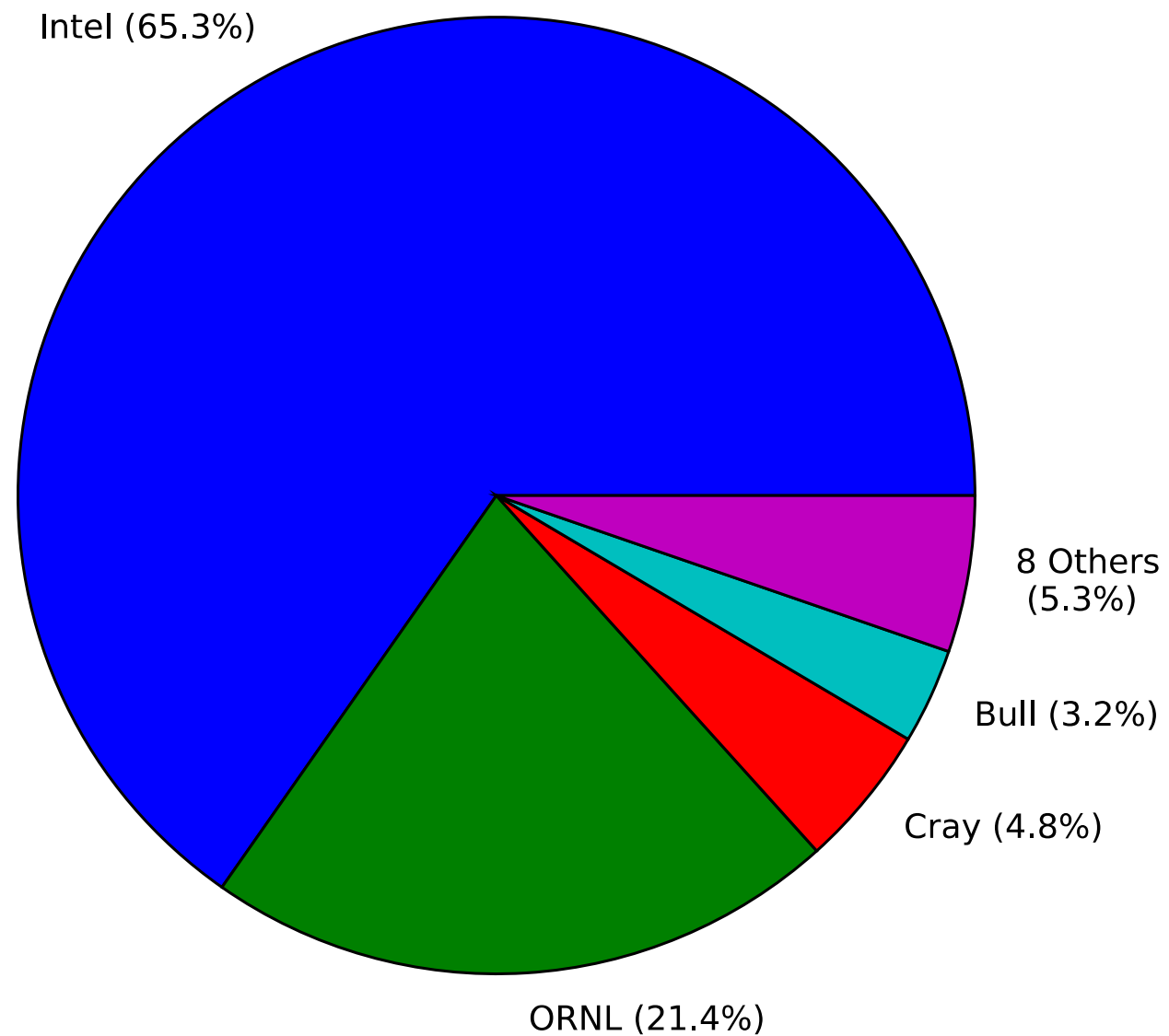
Developers Per Organization



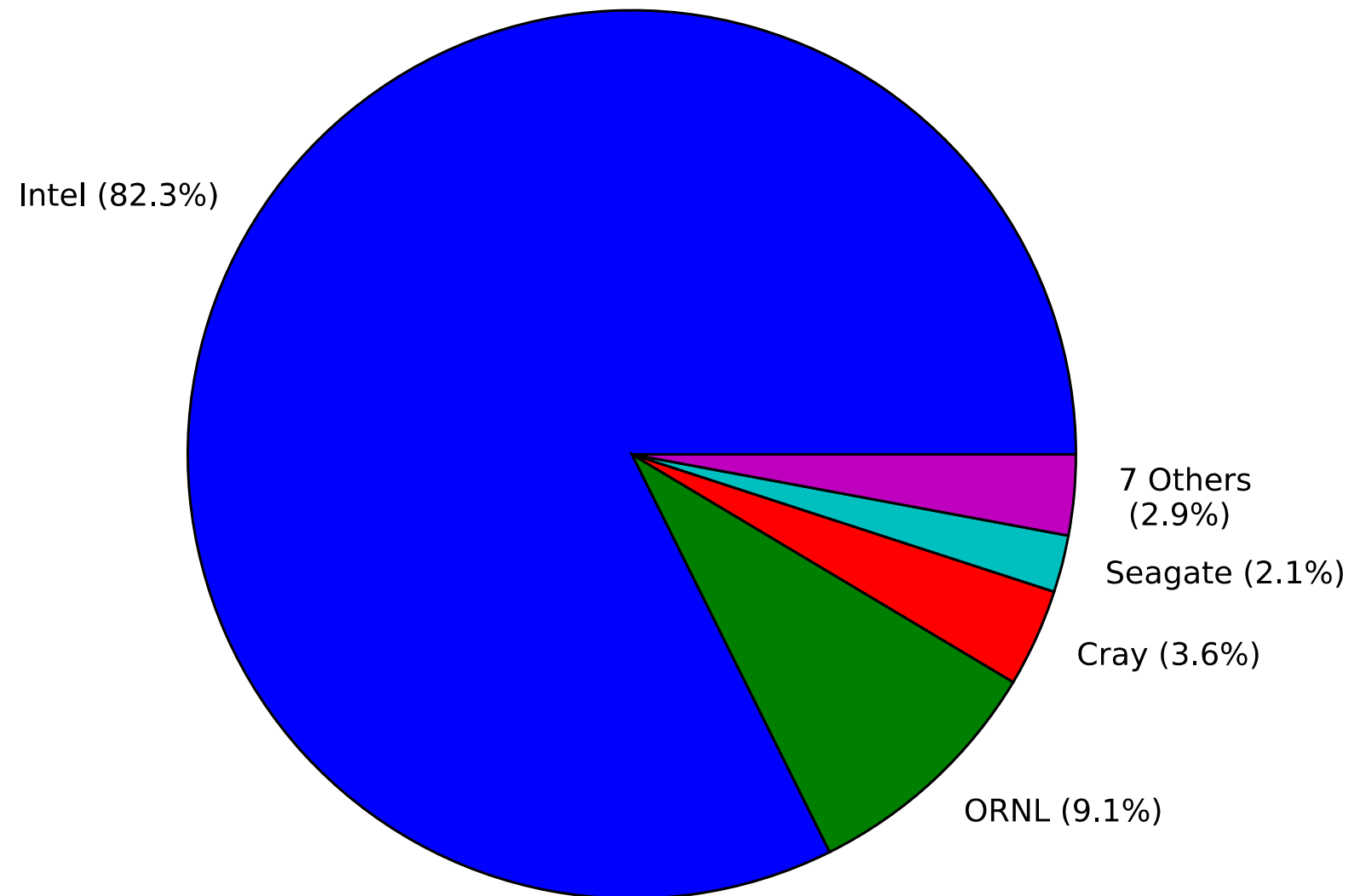
Commits Per Organization



Lines Of Code Per Organization



Final Commit Reviews Per Organization

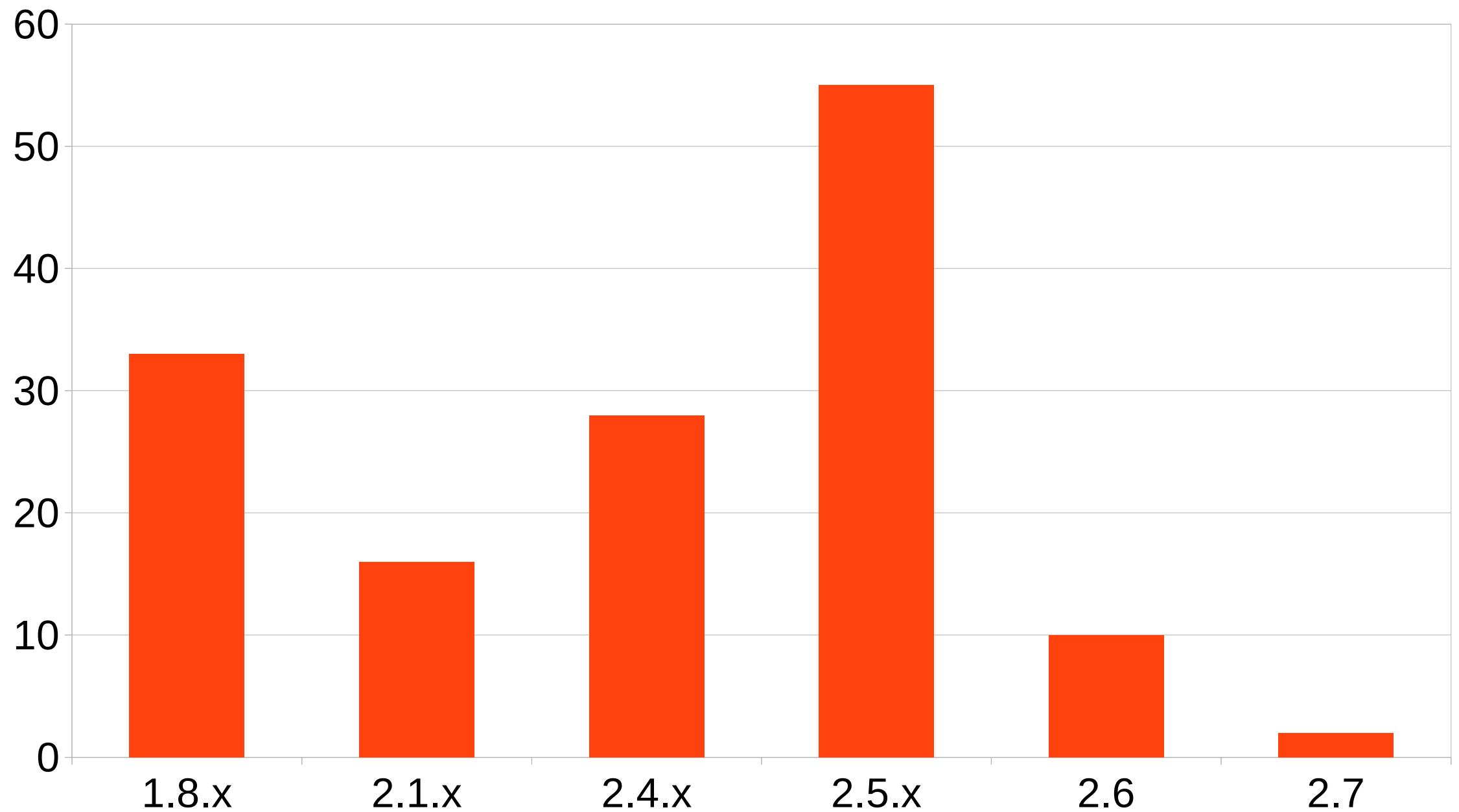


2015 Survey

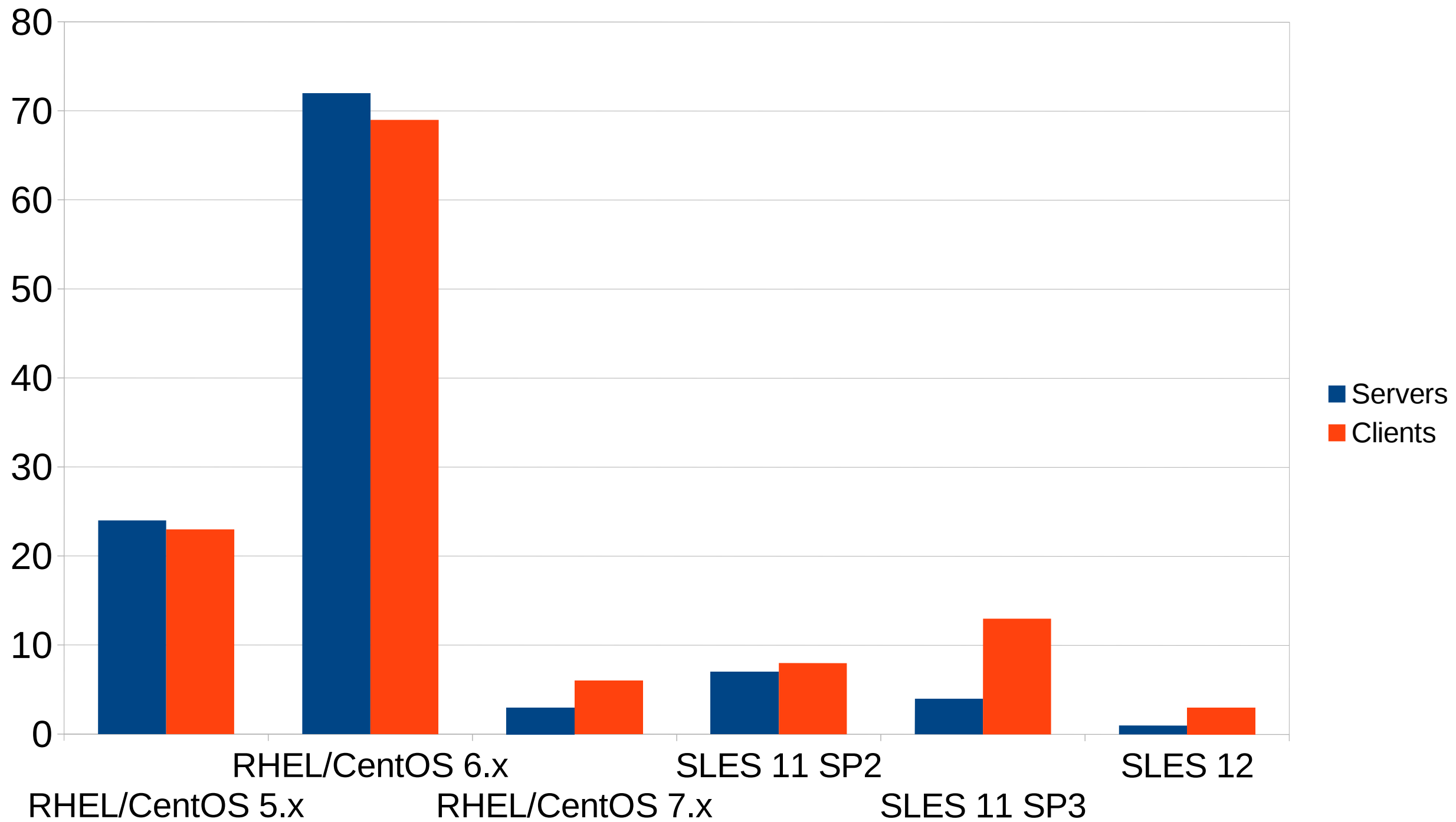
Survey Response totals

2012	90
2013	73
2014	76
2015	89

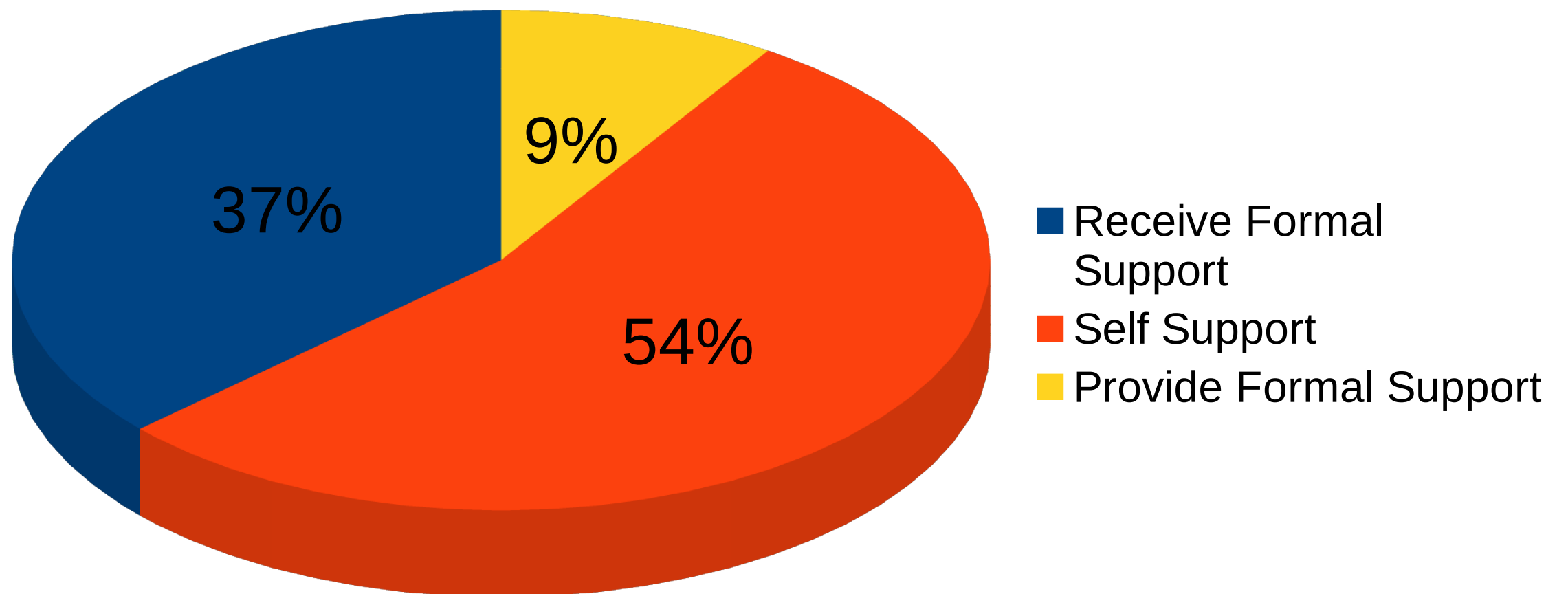
Lustre Versions in Production



Linux Distributions Used



Support Situation



We Need YOU!

- Managers
 - Make Lustre's master branch a priority for your employees
- Software Developers
 - Participate in code reviews
 - Contribute code improvements
- Everyone
 - Improve Lustre's documentation
 - Contribute to wiki.lustre.org

Come back to lustre.org!
Use the mailing lists.
Help generate content.



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High Level Release Information

Lustre Version	Commits	LOC	Commit Authors	Commit Reviewers
2.1.0	752	92K	55	NA
2.2.0	329	58K	42	NA
2.3.0	586	87K	52	NA
2.4.0	1123	348K	69	NA
2.5.0	471	102K	70	NA
2.6.0	885	147K	76	67
2.7.0	742	201K	65	60
pre-2.8.0	586	116K	72	66